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No. 9.

ON THE UNION OF FRACTURED BONE.

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THAT fractured bone is repaired on similar principles to solutions of continuity in soft parts, is a truth with which surgery has only become familiar of late years. The ingenious and complicated theory of provisional and permanent callus is now replaced by one as superior in its simplicity, as the modern appliances for fracture are to the cumbrous apparatus of former days. This improvement in scientific accuracy enables us to explain phenomena which are inconsistent with the older theories: such, for example, as the absence of callus and rapidity of cure, where perfect rest and apposition have been attained; as in the following case, for example:—

William Reynolds, aged 30, was admitted into the Meath Hospital April 3, 1854, suffering from fracture of both bones of the leg, the result of direct violence. The fibula was broken at the centre; the tibia was broken a little lower in two places, leaving the central fragment about three inches in length: both fractures being partly oblique, and partly transverse. The man was slightly under the influence of drink when I saw him, eight hours after the accident; he was inclined to be feverish and restless; and there was some probability of his deranging the fracture if put up in the box or side splints. I therefore applied the starched bandage and pasteboard splints after the manner adopted by Baron Seutin. The evaporation from the apparatus, joined to its equable compression, kept down local inflammation and effusion; and upon slitting it up next day, the fracture was found perfectly in apposition, and free from all symptoms of irritation. It is unnecessary to detail the subsequent history of the case from day to day; suffice it to say, that in four weeks the union was perfect, without the slightest irregularity in either of the bones to show where the seat of fracture had been. No provisional callus had been thrown out, yet the man was able to walk with the assistance of a stick at least ten days or a fortnight sooner than usual.

Facts like this must have come under the cognizance of most surgeons; but yet their application to the theory of the union of bone has been, until late years, imperfectly perceived. Such cases

tend to show that the absence of a provisional or ensheathing callus is not only no evil, but that it tends in a direct and absolute manner to shorten the period which is required for union. There is a plain connexion between the amount of callus and the length of time required for consolidation. When from any cause the callus is considerable, recovery is retarded, and there is subsequent debility in proportion. The presence of callus is further injurious,—it is a direct cause of œdema in the limb, both by its mechanical obstruction to the vessels, and by its inducing a hyperemic condition in the neighborhood of the fracture: this hyperemia is prolonged until the vessels have removed the superfluous mass of bone. We consequently find that fractures which are hard to retain in position, such as Colles's or Pott's fractures, or fracture of the upper part of the humerus, are prone to be followed by long-continued œdema and weakness; and these are precisely the kinds of fracture that throw out callus in greatest abundance. It is evident, therefore, that the mode of union by provisional callus is not the typical and simplest form; and that where nature has recourse to it, it is not because it is the best possible, but because it is the best available, means of cure.

If we turn to the simple laws which regulate the union of divided soft parts, we shall find the clue to the explanation of the union of bone. When a solution takes place in the continuity of soft parts, repair is effected by the organization of a minute layer of plastic lymph which is poured out upon the divided surfaces. Should any substance intervene, so as to prevent perfect apposition, it must be removed before union can take place. The organized lymph surrounds it on all sides; if it is capable of absorption the blood-vessels of the organized lymph remove it; if not, some of the plastic exudation is checked in its development into cells, and is converted into pus, which floats it away.

The source of the plastic exudation deserves attention; the efforts of nature tend to close the mouths of the divided blood-vessels, and any exudation from them must partake largely of the nature of a foreign body; for though some parts of a coagulum may be organized, yet the greater part of it must be removed before that can be effected. The exudation is rather poured out by the walls of the capillaries, and is in proportion to the intensity of the reactionary inflammation: if it is excessive, it also impedes reunion, either by a reflex of pressure on the vessels which are its source, or by an imperfect organization. The latter condition gives rise to suppuration, the former to a structure of low vitality. I have remarked that, in proportion to the energy of all organizing movements, the plasma which is their seat is converted into nucleated cells, which become subsequently developed into fibres; and into the interstices of these fibres the neighboring capillaries are extended; while by delaying the process, in its early stages, a form of organization is produced, of lower vitality, because less capable of being permeated by blood-vessels; in it there are fewer areolæ, owing to an imperfect deve-

lopment of fibres, and the tendency of such as are formed is to a rectilinear arrangement. This tissue forms the chief substance in the cicatrices of burns, and in other dense and imperfectly organized new structures.

The special organization of any new growth, whether healthy or diseased, appears to have one or other of these forms as its basis or starting-point; and a second process, either modelling, or of interstitial deposit, is necessary to stamp such growth with its individual peculiarities. Thus, for example, in cicatricial tissue, which connects divided muscle, whether it be areolar or indistinctly fibrous in the first instance, proper muscular tissue will be found after a longer or shorter time; it may be laid down without regularity at first, but, in course of time, it will assume somewhat of a normal arrangement, and this result will arrive sooner in proportion to the organization of the basis; it will be quicker in the areolar basis, and may never arrive in the fibrous; and in the intermediate forms will be found according as the areolar arrangement predominates. In like manner the yellow elastic tissue is found in old cicatrices of skin; and in all structures the same law of repair appears to hold.

I think it probable that similar laws hold morbid growths, or at least that we shall ultimately be able to refer them to similar fundamental principles. The union of fractured bone, whether perfect or imperfect, can certainly be explained by them. To take the most perfect and rapid mode of union, such as should be the object of the surgeon to attain as far as possible in every case, we find the phenomena to be, generally speaking, as follows. The blood-vessels of the bone and periosteum are ruptured; no displacement of the fracture occurs, so that their mouths are at once closed up; local reaction sets in rapidly, and the result of it is an effusion of plasma between the fragments from the vessels of the bone and periosteum; such molecules of bone as have lost their vitality from the fracture are removed by absorption, and the broken ends become by this means more vascular and soft. This process, which causes the ends of the broken bone to become apparently rounded, is active in proportion to the vascularity of the bone; it is in fact this preponderance of vascularity on the surfaces of a long bone (internal and external), that causes the edges to round off. The plastic fluid, which lies between the broken ends, is rapidly organized into granular nucleated cells; many of these cells become elongated into fibres, and into the interstices of these the capillaries push on.

This organization of the interposed layer of lymph is effected in about ten days. According as the capillaries are formed, the cells and fibres in contact with their walls begin to be the seat of osseous deposit; the granules and fluid which they contain become saturated with the earthy constituents of bone, and, ultimately, their walls and nuclei also. This process of ossification commences with the full development of the capillaries, and is completed in about a month from the time of fracture in the dense long bones of the adult. The time required is directly as the thickness of the bone,

and inversely as the vascularity; the more vascular, the more rapidly the union is completed; the thicker the wall of bone, the longer time is required.

This is the primary process of union or cicatrization of bone under the most favorable circumstances. Even when perfect apposition is not obtained by reason of the interposition of small spicula of loose bone, or isolated fragments of muscle, or small coagula, the process is essentially the same; for substances like these are surrounded by the organized plasma, which unites the fracture round them, and, in course of time, removes them by absorption; so that they only partially interfere, and only for a time, with complete cicatrization. There is, however, a higher degree of organization, which consists in the subsequent modelling of the bony cicatrix by development of canals, cancelli, osseous corpuscles, &c., such as exist in the rest of the bone. This is slowly effected, and in a manner which does not interfere with the usefulness of the limb. I have not made any observations which throw light upon the mode in which this is done, nor am I aware of any that have been made by others.

In compound fractures the process of union is conducted on similar principles. The only difference which I have observed is, that there is a proneness to throw out exuberant granulations from the injured part. Like the flabby granulations of an ulcer, these consist largely of cells, with very few fibres intermixed; osseous granules are deposited in these cells and in the interstices of them; their deficiency in fibrous arrangement renders them less firm and efficient as a bond of union. If we are to judge by the analogy of the soft parts, and the mode of keeping flabby granulations in check, I suppose we must conclude that these cellular granulations have their origin from bone in the removal of pressure. We see a similar fungating condition of brain in hernia cerebri when the pressure of the bony case is removed; and we have also something analogous to it in another growth, which is chiefly cellular, namely, fungus hematodes, when the support of the integuments has been removed.

These granular cells, also, form the chief constituent of provisional callus, and probably for the same reason. It cannot be poured out unless where pressure is removed to a certain extent; or, in other words, where imperfect apposition of the fragments leaves a space for it. Even when from the violence of reactionary inflammation much plasma is poured out round the bone, and into its medullary cavity, we have every reason to believe that this is absorbed without undergoing any organization, whenever proper apposition and support is given from the first. In very many cases early attention to these particulars prevents this excessive reaction.

This has a practical bearing on the treatment, for the fact of provisional callus being allowed to form, or forming in spite of us, delays the cure. The layer of plasma which lies between the frag-

ments is not converted into bone until the provisional callus is ossified ; so that a patient is often allowed to use his limb when the real process of union has only commenced, and a slight injury at that period will suffice to re-fracture the bone, or, more properly speaking, to fracture the callus ; besides, this callus takes ten days or a fortnight longer to ossify than the thin layer between the fragments, when the latter exists alone. Hence patients feel less confidence in using their limbs. There is a plain feeling of impaired strength in the bone ; the extra time of confinement to bed weakens their muscular powers, and the œdema which is kept up both from mechanical and vital causes, in such a limb, is a further reason why union by the help of provisional callus should be avoided if possible.

One of the first cases in which I used the starched apparatus of Sentin illustrated many of these remarks. Probably from the want of practice in its application, or from dread of applying it too tightly, I failed to procure union without ensheathing callus. The boy was two months before he could bear to lean any weight upon the limb ; it was a good deal wasted, and in going about he fell and re-fractured the bone ; it was now put up with considerable care, when we found that the callus was soon absorbed, and union of a firm nature took place rapidly. In several other cases I used this apparatus and found the result exceedingly satisfactory. Fracture of the tibia, or of both bones of the leg, whether uncomplicated or comminuted, when put up immediately after the accident, knit firmly in less than four weeks ; the perfect repose in which they are thus kept enables the process of direct cicatrization or union by the first intention, as it may be called, to be rapidly effected. In oblique fractures of the tibia, whether with lateral or antero-posterior obliquity, it is peculiarly useful. I have also used it in Pott's fracture with good results ; even in this fracture I am able to allow the patients to get out of bed and go about with the foot in a sling upon the third or fourth day. It thus enables us to do what Mr. Amesbury proposed to effect with his portable splint, and with almost a certainty of success, and little trouble.

The ligamentous substance which forms the bond of union in cases of what are called false joint presents us with an example of arrested organization ; and the various forms in which it is found, as well as the various means of cure, can all be explained by a reference to the laws of union in soft parts. The organization of the plasma may be delayed *in limine* ; the fluid may then simply coagulate into what is called nucleated blastema,—a tissue, as I have before mentioned, with little or no cellular or fibrous arrangement, and comparatively devoid of vascularity. When a little more rapidly organized it becomes simply fibrous, the fibres running parallel. In short, every gradation is observed between the dimly granular basis of simply coagulated blastema and the perfect cellulo-fibrous or nucleated fibrous reticulated tissue. Ligamentous union of bone may exist in either of these conditions, or in any

intermediate stage; and the success of any mode of cure will depend on its being adapted to the degree of organization. Where any amount of vascularity exists, successful union will be effected by removing the interruption to the further action of the vessels. It will suffice to place the limb perfectly at rest, and the blood-vessels will deposit osseous matter in the blastema which has been organized; even if the nucleated blastema forms the chief basis of the membrane, it becomes infiltrated, though slowly, with earthy matter, and a certain amount of local stimulation to the vessels will aid the process. If the connecting medium be very dense, and almost devoid of vessels or of organization, it will not be possible to convert it into bone, and the means of cure in that case will be such as will excite a fresh inflammatory action in the part. In such a case the dense cicatricial tissue is removed by the action of the excited vessels, just as it is in very dense strictures of the urethra, when we excite a new inflammatory action in the neighborhood, either by caustics or by incision; the process is, in fact, ulcerative absorption. It is to such cases of false joint that the seton is applicable, and its occasional failure will probably be found to depend on its doing too much in cases where it is not applicable. The use of ivory pegs, resection, and other plans of treatment of similar violence, are applicable to such cases. Fortunately, they are comparatively rare, and the simple adherence to perfect quiet is sufficient, in the great majority of cases, both to prevent the recurrence of this *contretemps*, and, if it does occur, to remedy it. I have found, as most surgeons probably have, that the simple starched bandage, strengthened, perhaps, with a little brown paper, will cure the greater number of ununited fractures. I have seen a dense ligamentous union of an oblique fracture of the tibia converted into bone, in six weeks, by this means alone.

The mode in which I apply the starched apparatus is nearly the same as that laid down by Baron Seutin. I have found it useful, however, to wet the bandages before rolling them; they lie more evenly, and with less strain at the edges, points of much importance where the slightest irregularity leads to œdema or vesication and pain.

Having protected all bony prominences with cotton-wool or soft tow, the wet roller is applied with perfect evenness to the limb, from its extremity to the joint above the seat of fracture. The outer surface of the bandage is now smeared with starch; narrow splints of pasteboard, softened in boiling water, and smeared with starch, are applied at each side; and, if necessary, behind and in front of the limb, extending upwards as far as the bandage. The edges of these splints are kept at least an inch apart from each other; another roller is applied outside the splints, and its outside well starched; if necessary, temporary wooden splints, or sand-bags, are used to keep the limb in position until the case is dry. As soon as this takes place (in twenty-four or forty-eight hours), it is slit up with scissors or knife, upon a director, between

two of the pasteboard splints. This admits of the limb being daily inspected, if needful, when it can be re-arranged by rolling a plain bandage outside, or by tapes attached to the case. If the case be too tight or too loose, it can be padded or pared accordingly. The evaporation which occurs during drying seems to keep down inflammation, as also does the even compression of the limb, and spasm is impossible. This casing is best applied as soon as possible after the injury. There is no question that perfect and immediate apposition of the fragments, with even support, prevents inflammation and excessive subcutaneous effusion; and if we wrap the limb well in cotton, and apply the bandages quite evenly, there is no danger of strangulating it. By leaving the nails uncovered, and pressing on them occasionally, we have a ready and unfailing evidence of the state of the circulation in the extremity. I have, however, never had occasion to relax the bandages before the case was dry, although I have repeatedly put up fractures in this way in a couple of hours after the accident occurred. Still, if the circulation appears impeded, or if the patient complains of pain, it will be safer to relax the apparatus than to run any risk of sloughing or gangrene.

Of the applicability of this mode of treatment in compound fracture I have had too limited an experience to speak with certainty; there is, however, no difficulty or danger in applying it when the fracture is such as will probably become simple by the union of the wound in the soft parts; and in such a case it will aid in bringing about this result.

In fracture of the patella it is very useful, and it is only necessary to strengthen the *lateral* splints by a second layer of pasteboard. It is evident, of course, that the lateral splints prevent motion in the antero-posterior direction, and the anterior and posterior splints prevent lateral displacement. Inattention to this simple mechanical fact may lead to disappointment.

MEDICAL AND SURGICAL EXPERIENCES AT THE HOUSE OF INDUSTRY.—NO. V.

BY C. E. BUCKINGHAM, M.D., FORMERLY PHYSICIAN TO THE INSTITUTION.

Erysipelas.

THE following cases of erysipelas, which, together with puerperal disease, existed in different parts of the South Boston establishment, can only be attributed to the entire absence of ventilation, and great want of cleanliness. Erysipelas and puerperal disease were not at the time epidemic in this neighborhood. The results of treatment in the several cases may possibly illustrate the comparative value of local and constitutional treatment in this disease, under peculiar circumstances.

I.—W. C., adult, male, admitted Nov. 15th, 1849, with erysipelas of face and head. Symptoms typhoidal. A ring was made

around neck with nitrate of silver. Sulphate of quinia, gr. j., every three hours. Wine, $\frac{3}{4}$ ss., 4 times daily. The disease extended over the thorax, notwithstanding the nitrate. Discharged, well, Dec. 19th, 1849.

II.—B. M., female, adult, inmate of house, pregnant, admitted to Hospital Nov. 23d, with sore throat. On the 4th day, erysipelas of face came on. It began in the meatus of both ears. Treated with sulphate of quinine in grain doses, every three hours, and broth. Afterwards got wine. Mercurial ointment about neck. There was no sloughing. Disease confined to head and face. Discharged, well, Dec. 26th.

III. Mrs. M., inmate, admitted to Hospital Dec. 2d, with erysipelas of both breasts and face. Lines of mercurial ointment were drawn about eruption, and it was confined to the original limits. Got one grain of sulphate of quinia every three hours, and broth. Discharged, well, Dec. 26th.

IV. Mrs. McD., admitted to Hospital Dec. 4th, with severe pain in head and stomach, for which she had an emetico-cathartic and a blister to nape of neck. Erysipelas of the neck developed itself on the drying of the blister, on the 10th of Dec. No delirium. The disease did not reach above the edge of the lower jaw, in front, nor above the edge of the hair behind. A line of the tincture of iodine was drawn around the superior edge, and another below the eruption. The disease passed over the whole trunk, notwithstanding the iodine. Got a grain of sulphate of quinia every three hours. Discharged, well, Dec. 29th.

V.—C. K., female, 3 weeks old, born in the house. Mother died of puerperal peritonitis, ten days before. Dec. 23d, disease began and covered the whole surface. On the 24th the head and extremities had vesicated. Treated by sulphate of quinia and sulphate of iron, each $\frac{1}{4}$ of a grain every two hours; and beef tea. Died on the 25th.

VI.—Jas. H., male nurse, in smallpox house, 60 years old. Attacked with erysipelas of face, during his service, Dec. 20th, 1849. It did not extend above lower eyelids, nor below the chin. Washed frequently with cold water. Got sulphate of quinia, gr. j., every three hours. Dec. 26th, face skinning. Discharged.

VII.—Catherine McK., adult, domestic; came from Charter street. Entered Hospital to be treated for acute sciatica of left side, Dec. 7th, 1849. Treated with blister and cathartics. Erysipelas of left hip came on Dec. 18th, and extended from trochanter to knee. For three days got sulphate of quinia every three hours, and beef tea. Well, Dec. 25th.

VIII.—Hannah K., from South May St., entered with typhoid fever, from which she was convalescing, Nov. 25th, 1849. Afterwards under treatment in the Hospital for hysteria. While there, was attacked with erysipelas of nose and ears, Dec. 29th, 1849. Got two grains of sulphate of quinia every two hours; two drachms of wine every four hours; beef tea and broth.

31st.—Pulse 128, eruption on cheeks, nose and breasts. Delirious and very feeble. Quinia to be continued, and wine whey.

Jan. 1st, 1850.—Skin cold, pulse 80. Eruption on same parts, but fading. Tongue dry and cracked. Continue treatment, and five grains of carbonate of ammonia every hour, p. r. n.

2d.—Skin every where cool. Eruption almost gone. Skin desquamating. Teeth covered with sordes. Tongue dry and cracked. Speaks with difficulty. Pulse 72, distinct but feeble. Has taken medicines as directed to this time, and the wine whey and beef tea freely. Quinia as before. Ammonia every three hours in four grain doses.

3d.—Skin warmer. Pulse 72 and more full. Continue treatment.

4th.—Forehead covered with a dusky red eruption, extending into the hair. Pulse 72 and small. Teeth covered with sordes. Increase quinia to two grains every hour.

5th.—Eruption same, but more livid. Refuses medicine. Muttering delirium, at times.

6th.—Everything was omitted but the whey.

7th.—Pulse 72. Skin cold.

8th.—Eruption on face and head the same. Pulse 64. Skin warmer.

10th.—Eruption fading. Skin desquamating. Delirious. Pulse 64. Asks for food. May have broth *ad lib.* No medicine.

11th.—Same condition.

12th.—Died last night.

Hospital Reports.

MASSACHUSETTS GENERAL HOSPITAL.

Cases of Fracture of the Pelvis, under the care of Dr. H. G. CLARK.
(Continued from No. 6, page 119.)

CASE III. *Fracture of the Pubis and Ischium in three places—Puncture of the Bladder, by the Perineum—Death.*—John Webber, seaman, æt. 29, an unusually strong and muscular man, entered the Hospital May 7, 1852, at 7, A.M. He gives the following account of himself. He is master of a coaster, and while at work in the hold, the day previous to his entrance, at 3, P.M., discharging a cargo of heavy timber, his pelvis was pinched edge-wise between two of the sticks, weighing from six to ten tons. He had, at the time, a sensation of "something bursting within." He was seen in the evening by a medical man. A catheter was passed, and a few drops of blood only escaped from the urethra.

Patient is now lying helpless on his back. No crepitus can be felt about the pelvis; there is perfect motion in both hips; but when the right lower extremity is drawn up, he complains of severe pain in the perineum and right ischiatic region. He has very little voluntary power over this limb. He can be turned upon the left side, but complains of pain in the above-mentioned localities, which amounts to perfect agony when an attempt is made to turn him upon his right side. The base of scrotum, the perine-

um, and right buttock, are much swollen, ecchymosed, and extremely tender on pressure. On introducing the catheter, about 3ij. of blood and coagula escaped. He says that his bladder was nearly empty at the time of the accident. Abdomen tumid; dull on percussion, above the pelvis, midway to the umbilicus, resonant elsewhere. Some tenderness on pressure; and paroxysmal pain resembling colic in the lower part of the abdomen. The patient has considerable febrile excitement. Countenance flushed; tongue covered with a white coat, dry at centre; great thirst; pulse 96, full and strong; symptoms sthenic; no prostration. Liquid diet. Poppy leaf fomentations over hypogastrium.

4, P.M. Fever increased. No diminution of pain and tenderness. He desired to micturate, and thinks a small amount of urine escaped into the perineum. A catheter was passed, with the same results as previously. He complained of much tension in bladder. Pulse 116, hard. Venesection, 3xx. R. elix. opii, gtt. xl. pro re nata.

May 8th. Webber rested at intervals through the night. He had occasionally a sensation as if urine escaped from the bladder, followed by "scalding" pain. At this visit, there was found a rounded and well-defined tumor above the pubis, reaching nearly to the umbilicus. The swelling of the perineum and scrotum had increased, the integuments being of a dark livid color. The patient has more control over his extremities than yesterday. The right thigh was flattened from before backward. Countenance more tranquil; skin warm and perspiring; complains of flatulency; pulse 120, soft and regular. A catheter was passed, and a small amount of blood of an urinous odor escaped; the instrument immediately became clogged with coagula, probably from rupture of the urethra, as unless care is used, the beak of the catheter escapes to the right side of the urethra.

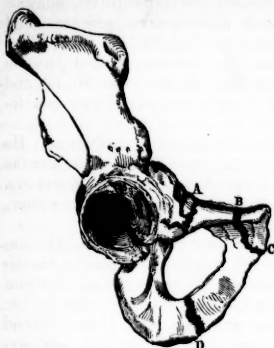
The patient was placed in the position for lithotomy, and sulphuric ether was administered. A grooved staff was passed into the bladder, and retained by an assistant. An incision was made into the raphe of the perineum, about 3½ inches in length, through the various tissues infiltrated with blood and urine, to the membranous portion of the urethra, which was divided on the staff. The dissection was continued upwards as far as the prostate gland, and immediately a large amount of coagula and confined urine escaped. The incision was further extended downwards and outwards between the right ischium, and the rectum, and the soft parts in the neighborhood were found to be extensively infiltrated with urine. There was found to be a transverse fracture of the ramus of the ischium near the tuberosity. Considerable hemorrhage occurred during the operation, in part made up of blood previously effused from the lacerated vessels. Two arteries required ligature. A catheter was passed into the bladder through the wound, and retained by a bandage. The wound was stuffed with a sponge. Brandy and tr. opii, p. r. n.

8, P.M. Good re-action. Expresses himself much relieved by the operation. Pulse 120, good. The bed was drenched by serum and urine from the wound. About four ounces of urine, stained with blood, flowed from the instrument.

May 9th. Rested tolerably through the night. Less tenderness of abdomen. Lips tremulous. Skin hot and moist. Bowels constipated. Great thirst. Pulse 124, redoubling. Urine passes freely from wound. Sponge removed, and lint wet with cold water substituted.

The patient rallied for a few days, but the wound became gangrenous, and after lingering in a typhoid condition, he died in a state of extreme exhaustion, June 1st.

At the autopsy, the pelvis was found to be extensively fractured, as will be seen from the following figure, engraved from a drawing made by Mr. J. M. Sargent.



A. Fracture in front of glenoid cavity, through ilio-pectineal eminence, into foramen ovale.

B. Fracture through pelvis, just without symphysis.

C. Fracture through ramus of ischium, anterior to tuberosity.

D. Fracture through ramus of ischium, anterior to tuberosity.

At A, the bone was extensively comminuted. The soft parts in neighborhood of fracture were gangrenous. Bladder not ruptured.

CASE V.—Injury of Pelvis—Recovery.—Silas Goss, æt. 29, brakeman, entered the hospital May 2d, 1854. He was a stout healthy man. While engaged in shackling two cars together in Haverhill, at the Maine Railroad station, he was caught by the "bunters" and jammed between them; one striking him on the left buttock, and the other on the right os pubis, near the angle. He was brought to Boston in the freight train, in a sitting posture all the way.

On examining him after admission, the right foot was everted; but the leg could be moved freely in all directions, not however without causing him pain. No crepitus or displacement of any kind could be detected. On pressing the ilia together, he complained of great pain near the angle of the pubis, on the left side; and was firmly impressed with the belief that his "crupper bone" was fractured, but no crepitus could be detected in that situation. He was in great distress while endeavoring to pass his water, which he could not do till he was placed in the warm bath, when he voided about a pint of clear urine. By holding on to the wall with his hand, he could stand on one leg while the urine was drawn off in the evening by the catheter.

May 3d. Examined by Drs. Clark and Parkman. No crepitus to be detected.

Double inclined plane for right leg. Bath of laudanum and water across pelvis. Bladder to be relieved by catheter twice daily. At bed-time elix. opii, ʒss. Liquid diet.

May 8th. Continues to pass his urine by the catheter, morning, noon, evening, and midnight. On depressing the beak of the catheter, so as to reach the bottom of the bladder, as he lay, a little muco-purulent fluid with some blood was passed. He complained of no pain, except in the urethra, during the passage of the instrument.

May 12th. He passed urine three times during the night, without the catheter. From this time he continued to improve, and was discharged well, May 24th.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY WM. W. MORLAND, M.D., SECRETARY.

MAY 14th.—*Rapidly fatal Case of Acute Rheumatism, with very slight Pericarditis and little or no abnormal Effusion.*—Reported by Dr. HODGES.

Thursday, May 3d, 1855, saw J. C., æt. 17. For several days previous, he had worked in a damp cellar. He was kept awake the night preceding the visit by an acute pain in his feet, which, still continuing with severity, was found to arise from an acute rheumatic affection of nearly all the joints of both feet, especially of the toes. He was complaining greatly, and had a full pulse of about 90. No rational or physical signs about the cardiac region. Urine in sufficient quantity, very dark colored, coagulable, and containing blood globules. Prescribed one grain of opium once in four hours. Warm water fomentations to his feet—very light diet.

Friday, 4th, 10 o'clock, A. M.—Had taken four pills and passed a comfortable night; was sitting up, and said he felt better. The pain in his feet was less, but he now complained of his knees. Pulse as before. No physical signs about the heart. Urine the same. Continue the pills p. r. n., and take of wine of colchicum seeds, gtts. xx. every four hours. He sat up the greater part of the day, in the course of which he took one more opium pill; went to bed at evening and slept till 2 o'clock, A. M., of the 5th, when he began to complain of great oppression about his chest, which was treated lightly, at first, by his friends, but as it continued to increase in severity, a physician near the house was sent for about 4 o'clock in the morning, who pronounced him beyond the reach of medical assistance, and an hour afterwards the patient was dead—about sixty hours after the appearance of the first symptoms.

At the autopsy, 10 hours after death, the organs were found healthy, with the exception of the kidneys and pericardium; the former were exceedingly encysted, but bore no other marks of disease. The pericardium contained, at the utmost, $\frac{3}{4}$ ij. of fluid, flocculent from small shreds of lymph, but the effusion produced no degree of distension. The surface of the pericardium was coated in a few spots with recent deposits of lymph. There were no adhesions, recent or old, and no valvular or endo-cardial alteration. There was passive congestion of both lungs, posteriorly, to a slight extent. The brain was not examined.

The patient had never had rheumatism before. He retained his consciousness and intelligence to the last. There were no signs of narcotism or coma, nor was there any diarrhœa.

MAY 14th.—*Phthisical Signs at the base of the Lungs.*—Dr. ABBOT reported the following case of phthisis commencing at the base of the lungs.

April 24th, 1855.—Mrs. S——, aged 33; cough of a year's standing; copious expectoration of thick, yellow, sometimes bloody sputa. Never has had any true hæmoptysis; no night sweats; occasional heats and chills. Catamenia absent for a year past. Was nursing an infant up to November last, when she weaned it, thinking herself *enceinte*. No signs of pregnancy at the present time. Appetite good; bowels regular; has lost much flesh and strength; much troubled by palpitation.

Examination of the chest.—Percussion of right front chest in the upper half, sufficiently resonant; below, quite flat. Left front chest resonant throughout, but less so than upper right front. Respiration in upper half of right lung in front, normal; below, obscured by loud, gurgling rales; in left front,

clear throughout, without rales, except at the summit, where there is rude and prolonged expiration.

Percussion of back gives signs corresponding with those in front; auscultation the same; loud, gurgling rales and pectoriloquy being heard from right scapula downward, with exalted respiration in left back, without rales.

Copious night sweats had occurred at the time of the last record, May 14th.

MAY 28th.—*Abscess of the Brain—Death—Autopsy.*—Dr. ELLIS related the case. The specimens were taken from a single woman, 25 years of age, a native of Maine, who had been employed for some time in a book-bindery. At the time of her entrance into the Hospital, on April 20th, she answered questions with reluctance and some difficulty, but stated that she had suffered from pain in the head for a number of weeks, and, that a week before, the left side became paralyzed, without loss of sensation. The pain in the head continued one of the most prominent symptoms, until her death, being sometimes referred to the frontal, sometimes to the occipital or temporal regions, and once, towards the close, to the neck. The dilated pupils contracted slowly on exposure to the light; strabismus was several times noticed, and, on one occasion, the sight of the right eye was reported as less perfect than that of the left, the hearing on that side, at the time, being also impaired, though generally intact. Although she continued to answer questions slowly, nothing appears in the record to show that the mind was essentially affected. There was no tendency to somnolence, and she was often restless at night. The face was several times mentioned as flushed, but general febrile symptoms were absent, the skin being moist, and the pulse often falling below (58—60), but never rising above the natural standard. The appetite was good, but the bowels were quite costive. On April 30th, it was reported that quite a free discharge, supposed to be catamenial, made its appearance every four days, and subsequently an offensive discharge from the vagina was mentioned.

On May 10th, though able to move the left hand, the arm was almost powerless, and ten days later a loss of strength was noticed in the right limbs. This last extension of the paralysis had been preceded for two days by nausea and vomiting, and the patient was evidently failing, but the change was not such as to lead one to expect an immediately fatal result. At 2, A. M., however, on May 23d, she died, having risen from her bed an hour previously.

Autopsy, 32 hours after death. Of medium size. Parietal eminences unusually prominent. Cadaveric rigidity well marked. Considerable bluish discoloration of dependent parts.

Brain.—On the removal of the calvaria, there was noticed a remarkable projection of those portions of the brain immediately below the parietal eminences. Marked vascularity of the dura mater, over the convexity of the organ, where the convolutions were much flattened, and the sub-arachnoid fluid was wanting. At the vertex, in the immediate neighborhood of the longitudinal fissure, on both sides, beneath the arachnoid, were collections of pus, sufficient to obscure the pia mater. These marked the seat, in the substance below, of firm nodules, of about the consistence of the pons varolii, two in each hemisphere, from half an inch to an inch in diameter. A fifth was also found in the anterior part of the middle lobe, on the right side, the surface being, at this point, adherent to the dura mater. On incision, these were found continuous with, and evidently parts of, the cerebral substance. The external portions were of a greyish color and somewhat vascular, while the more central parts were decidedly yellow,

though still firm in the smallest nodule; but in the others more or less softening had taken place, and in the largest, in the right hemisphere, was a well-marked abscess, measuring an inch in its longest diameter, the very thin superior wall of which was ruptured, on the removal of the dura mater, allowing the escape of a little pus. The substance of the brain, generally, was softer than usual, but those portions between, and extending several inches beyond the diseased foci (farther anteriorly than posteriorly), had a peculiar, moist, shining, gelatinous appearance, were of a white color and very soft, although of sufficient consistence to retain their form, if carefully handled. The anterior part of the right middle lobe, for some distance from the nodule mentioned therein, was, however, in a diffuent state, so that it was washed away by a gentle stream of water. The corpora striata and optic thalami were no softer than those portions of the brain farthest removed from the disease. The lateral ventricles contained a little more fluid than usual.

The thoracic and lumbar portions of the spinal cord were examined and found healthy.

The left lung was slightly adherent at the apex, where were two old caseous masses, from two to four lines in diameter; also a small cavity, a quarter of an inch in diameter, containing pus, and lined with a smooth bluish membrane. The tissue immediately adjacent was condensed and fibrous. Organs in other respects not remarkable.

Heart normal, with the exception of several perforations near the free edges of the valves of the aorta and pulmonary artery. Liver fawn-colored, with light-red, congested points. Under the microscope, numerous fat globules were seen, both free and filling the cells.

The capsules of the kidneys were removed with greater ease than usual, and the organs were much congested.

The mucous membrane of the stomach was rugous and mammillated, and had, generally, a more reddish tinge than usual, mostly on its posterior surface, from the cardiac orifice to the pylorus. Near the former were numerous minute ecchymoses arranged in an arborescent form.

The peritoneal surface of the uterus and Fallopian tubes was of a dark-blue color, and adherent to the posterior wall of the pelvis by means of a few delicate bands. The pelvic veins contained an unusual amount of blood. Mucous membrane of the vagina of a dark-blue or grey color.

The nodules in the substance of the brain were evidently not of a tuberculous nature, but the result of inflammatory action, and as such, were interesting, showing, as they did, several stages in the formation of an abscess.

MAY 28th.—*Abstract of a Case of severe supra-orbital Pain, accompanied with Vomiting of Oil, &c.*—From the report read to the Society. By Dr. PARKS.

March 12th, 1855.—Mr. B——, æt. 51, from Vermont; successively a farmer, teamster, and keeper of a livery stable. His complexion, formerly very clear, has of late been exceedingly sallow. The adipose tissue is scanty, but his muscles are highly developed. His family are not tuberculous or cancerous, *except in the case of an aunt who had cancer*. He has always been perfectly temperate. General health good till within about eight years. Within that period he has had attacks of headache, preceded always, for a day or two, by fetor of the breath, nausea, and voiding of oily matter by the mouth. These attacks occurred at first as often as once in one or two months, afterwards increasing in frequency till within a short

time past. When Dr. P. first took charge of him, two and a half years ago, he was having these attacks about once in three or four weeks.

The oily matter is *vomited*, but with extreme ease. To use a homely term, it is *gulped up*. It is most apt to be ejected after eating, but sometimes appears as often as once in half an hour, through the day. It often appears, to the naked eye, to be perfectly free from intermixture with the other ingesta—if indeed it belong to them at all—though sometimes there is a little food with it. Generally, though not invariably, it leaves a sensation of burning in the throat. It has an unpleasant but indescribable taste. It burns with flame, like oil, on being ejected into the fire; and also stains wood in the same way as does oil. A specimen of this peculiar fluid placed under the microscope showed a transparent liquid, containing an abundance of oil globules, and some other objects which were considered by Dr. Shaw to be vegetable matter. Dr. S. also confirmed the presence of oil.

The headache is always confined to a space of the size of a dollar, over the right eye, the lower border of the affected region nearly coinciding with the eyebrow. In this region, the skin is tender on pressure. When the forehead is thus affected, the veins are seen to be turgid at the seat of pain. He has *no pain elsewhere*, except what he calls rheumatism in the hips and ankles on taking cold.

The patient states that his urine is usually rather high colored, but more so during his attacks of pain, when it is also increased in quantity. It is not thick at these or at other times; nor is it difficult of evacuation. I have submitted to examination three separate specimens of the urine passed at different times, and none of them were coagulated by heat or nitric acid. One of these specimens was voided soon after an attack of pain. It had a specific gravity of 1025. Its reaction was acid. Heat and nitric acid rendered the specimen under examination clearer; at first it was of a deep red color, and somewhat cloudy. Under the microscope, circular bodies were seen, transmitting light like oil, and were believed by Dr. Bacon to be oil, but in quantity insufficient to warrant any inferences.

The alvine discharges are occasionally light colored, especially during the attacks, but not in a marked degree.

The appetite is somewhat affected during the continuation of the symptoms. The tongue is rarely coated.

The symptoms subside and finally disappear in about twenty-four hours after reaching their acme, which it takes the *pain* about the same length of time to attain. The patient does not, in his worst state, confine himself to the house, but attends daily to his business.

The abdomen, usually quite prominent, becomes flat during the visitations of oil-vomiting. For a short distance to the left of the linea alba, and over a small space below the transverse colon, percussion is decidedly dull, and there is tenderness on pressure, and hardness. These physical signs have gradually become more marked during the last two and a half years, and have been verified by Dr. H. O. Stone, in consultation. No defined tumor can be made out, nor can the continuity of the hardened tissue with the liver or any other organ be demonstrated.

The patient has tried brandy with his meals, cathartics, emetics, bismuth, nitrate of silver, iodide of potassium, Fowler's solution, creosote with gin, albumen of eggs, with abstinence from oleaginous ingesta, and counter-irritation at the epigastrium. From none of these has he derived more than partial and temporary benefit. The symptoms have latterly, however (Sept. 1), been considerably ameliorated, though by no means removed, by a combination of sulphuric acid with tr. cinchon. comp. and syrup of ginger.

The case is deemed interesting from the singular combination of symptoms, and the obscurity of its pathology. The voiding of oil, though not mentioned usually in the books, is not adverted to here as a unique fact, several cases having come to the knowledge of the reporter.

MAY 28th.—*Suspected Syphilitic Disease of the Throat—Death—Post-mortem Appearances.*—The case was reported by Dr. C. D. HOMANS, who also exhibited the accompanying morbid specimen, which was thought worthy of being laid before the Society, inasmuch as it was the result of a form of disease, of which the profession possesses only a very small number of recorded cases.

To the patient in whom it occurred, it was a local accident, manifesting itself in the course of another affection, and only important from the additional suffering thus created. It is not, therefore, proposed to present, with any minuteness of detail, the general history of the patient.

Mrs. O——, æt. 18, native of Maine; an only child. Her father died in middle life, of acute disease; her mother is living, in average health; she herself is always weak, pale, feeble; there are no enlarged glands, or traces of scrofulous abscesses; she has been subject, for three years past, to lichen, most marked on the back, fore-arms, and insides of the thighs.

In November, 1853, she was married, and was at that time stronger and looking better than for some time previously. Ten days after marriage, symptoms of acute gonorrhœa occurred; though desirous to establish the fact of syphilitic infection, she described nothing, either at this or at any subsequent period, indicating the existence of the primary symptoms; nor could any traces of chancres or buboes be discovered. Her health became much impaired. In February, 1854, she separated from her husband; remained so for six weeks; lived in the country; was treated, chiefly, by copiba; regained flesh and strength; the discharge from the vagina was never wholly checked; in the autumn of 1854, it became much more abundant.

Toward the close of December, 1854, she began to suffer from irritable stomach, and attacks of vomiting, more or less urgent, continuing for a week or ten days, and followed by a longer interval of comparative rest. One month later, in February of the present year, constant diarrhœa, without much pain, supervened. The vomiting continued to recur, and the diarrhœa persisted, with intervals of occasional slight abatement, till death, which took place on the 26th of May. The matters vomited, during the last three weeks of life, were fluid, of light green color, with very little offensive smell. The discharges from the bowels resembled, in gross appearance, the ordinary contents of the gall-bladder, largely diluted, and holding in suspension much shreddy mucus. The emaciation, pallor and feebleness, were very marked.

Lesions, as follows:—On the dorsum of the *tongue*, one or two large aphthous patches; in the *pharynx*, a gangrenous ulcer, to be more fully described hereafter; at the cardiac orifice of the *stomach*, was an ulcer, half an inch in diameter, with ragged edges, and emitting the odor of unhealthy pus; *small intestine* in a state of active ulceration, from the ilio-cæcal valve upward, for fourteen or fifteen inches; six or seven inches below cæcal valve, the *large intestine* presented one doubtful ulceration, of half an inch in diameter. *Pancreas* much and uniformly indurated; not otherwise evidently diseased. *Liver* and *spleen* normal.

At apex of left *lung* was a cretaceous mass, of the size of a large pea. Both lungs otherwise healthy, though *post-mortem* congestion was quite marked in the dependent portions of the lower left lobe.

Uterus of normal size; walls very firm, as dense as an average fibrous tumor; its body strongly flexed on its neck, anteriorly, and bound down by firm adhesions; the canal of the cervix much narrowed near the internal mouth, and its walls quite thin at the point of flexure. (Patient never presented symptoms of pregnancy.)

In the last days of April, a month before her death, the patient began to complain much of her throat; slight redness of the fauces was noticed for two or three days, but on the second of May this had disappeared; there was no tenderness of the larynx; voice unaltered till within three days of her death; then somewhat hoarse.

The throat was, however, her greatest source of suffering, for the last three weeks of life. Deglutition was painful to her, even that of liquids. Before speaking, she constantly carried the hand to the upper part of the throat, and the effort was always a painful one. Much fetid, purulent matter was raised on slight effort, from time to time. This was especially remarked during the ten days preceding death; while the chief complaint of positive suffering, was during the fortnight earlier than this. For thirty-eight hours before death, she had cough (from which she had been, till that time, wholly free), and the breathing was labored.

In consequence of her great exhaustion, a very thorough examination of the throat was hardly possible. Nothing could be seen by the ordinary depression of the tongue. No other treatment was directed to the throat than an astringent gargle, administered by the nurse, and, as the patient thought, with relief.

At the level of the fifth cervical vertebra, a black, gangrenous-looking, very offensive patch was observed upon the pharynx, about half an inch in diameter, and extending nearly two-thirds around the canal, communicating with its interior by an opening of about a quarter of an inch in diameter, situated near the posterior median line, in front of the vertebra mentioned. The vertebra itself and the larynx were in a healthy condition.

The question of the presence of constitutional syphilis in the case just described, and of the value of the affection of the throat, as bearing upon that question, cannot fail to prove now, as well as in the lifetime of the patient, somewhat embarrassing.

No traces existed of bubo or chancre; the cutaneous eruption was of, at least, questionable specific character, while the cachexia, though very marked, seems susceptible of explanation without admitting venereal disease.

Perhaps it may not be deemed out of place, to remind the Society of the excellent monograph, published four years ago in one of the leading American Journals, entitled "Cases of Retro-pharyngeal Abscess, by Charles M. Allin, M.D., of New York."

MAY 28th.—*Peritonitis in a Child—Sudden Death—Inflammation of the Uterus.*—Dr. C. E. WARE reported a case of peritonitis in a child one year old. It was a female, and weaned. He was called to it at five o'clock in the morning. It had travelled all the previous day in the cars, and was perfectly well when it went to bed. It was taken about midnight with an apparent difficulty of breathing, and appeared to suffer slight pain. It became very restless, tossing itself about, but not crying. Soon after the attack it had two quite free evacuations from the bowels, in which there was undigested orange peel, which the child had eaten the afternoon before. It had also eaten raw apples.

When Dr. Ware saw it, it was upon the bed, rolling and tossing about.

It was bright, and although very restless, not fractious. It did not appear to be in pain. The skin was cool and dry; the pulse feeble and quick. There was no apparent tenderness upon pressure in any part of the abdomen, nor very great fullness. The urine was scanty. The respiration was somewhat labored and hurried. There was no nausea. Although 3 grs. of the sub-sulphate of mercury and 10 grs. of ipecac were given in divided doses, no action of the stomach was produced. A table-spoonful and a half of castor oil had no effect whatsoever. The child drank freely, and retained everything. She continued in this state until evening, without presenting any other symptoms to give a clue to the nature of the difficulty, when she began to sink, and at 12 o'clock died, 24 hours from the commencement of the attack. At the autopsy there was found acute peritonitis about the uterus and its appendages. The peritoneal surface of the uterus and the ovaries was most intensely red. There was an effusion of turbid serum, and flocculent lymph. The inflammation was entirely local, and confined to the pelvis. No signs of disease were found in any other organs.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 27, 1855.

QUARANTINE.

By an official notice, signed by the Port Physician and City Physician of Boston, all vessels which may arrive here previous to the 20th of October, from ports where the yellow fever is now prevailing, are required to go into quarantine for the purpose of examination by the Port Physician, before they can come up to the City, or discharge their cargoes. The passengers and crews will not be restrained in their personal movements. This is a wise precaution, since, though there is no danger of yellow fever becoming epidemic in Boston, it might prevail to a limited extent, were the disease introduced into certain districts.

WHY IS NORFOLK SICKLY?

UNDER the above head, we notice, in a late number of the *New York Daily Tribune*, an article descriptive of the locality of this ill-fated city, which justifies the words with which the article commences,—“A more reasonable question to ask would be, why is it ever healthy?” The following extracts give an idea of the situation of Norfolk and Portsmouth. “The two towns are situated on an arm of the sea projecting far inland from Chesapeake Bay. ***** All the adjacent lands have so recently emerged from the sea, that the mud and malaria-generating matter have not yet undergone the change necessary to make it healthy for the abode of men.***** The Dismal Swamp, one of the largest, deepest and most impenetrable in the United States, almost touches the suburbs of Portsmouth, lying on the south side of one of the little arms of the bay; while Norfolk is situated opposite, on the north, surrounded on three sides with stagnant water; immediately in contact with the houses and all around, for twenty miles or more, the land is almost flat and but slightly elevated above the sea level.”

This description is confirmed by a resident for the past two years in Norfolk, who informs us that the city is destitute of sewerage, and that its streets are extremely filthy, being often strewn with refuse vegetables and

other garbage, which result from the immense quantity of provisions brought into the city for export. These matters become rotten, and emit a most noisome stench. The turkey-buzzard, the natural scavenger of the South, is not found in Norfolk, but his place is supplied by crows, who wander at will through the town, and gather an unhealthy subsistence from the cabbage stalks and other substances which lie in heaps on the ground. The condition of Portsmouth is much worse than that of Norfolk. It is connected with Gosport by a causeway, nearly a mile in length, if we are not mistaken, across a swamp or flats, from which arises a powerful stench.

These facts are sufficient to account for the extraordinary spread of the yellow fever, after its first introduction, and we trust they will be so far appreciated by the local authorities as to lead to the institution of sanitary improvements as soon as the subsidence of the epidemic shall allow the necessary measures to be taken. It may not be possible to prevent the disease from re-appearing, but cleanliness and drainage will go far towards restraining the scourge within comparatively moderate limits. In the mean time, let us hope that the lesson may not be lost upon other places in a similar hygienic condition,—that the apathy which exists so extensively on this important subject may be exchanged for an enlightened wisdom in sanitary reform,—that the maxim, "cleanliness is next to godliness," may become a proverb throughout our land.

IODINE IN THE TREATMENT OF ERYSIPELAS.

MESSRS. EDITORS,—I have just received a letter from a friend who stands very high in our profession—especially in the department of general surgery—in which he incidentally refers to the external treatment of erysipelas with the tincture of iodine. I send the extract to you, as confirming the views which have been set forth on the subject in your Journal. Dr. Alden March, the gentleman to whom I allude, is not a careless observer, nor does he form hasty conclusions. His authority should carry great weight. After referring to the subject matter, he says,—“The chief topic of my lecture tomorrow morning will be the treatment of erysipelas, when I shall take occasion to read extracts from last week’s Journal. The testimony in favor of the beneficial use of iodine, as an external application, seems to be quite conclusive, and accords with my own experience.”

Boston, Sept. 19, 1855.

Respectfully yours,

R. H. SALTER.

Books and Pamphlets received.—A Manual of Clinical Medicine and Physical Diagnosis. By T. H. Tanner, M.D. Philadelphia. Blanchard & Lea, 1855.—A reply to the Attack made by two Professors of McGill College, Montreal, upon the Graduates of Queens’ College, Kingston, by John Stewart.—Yellow Fever, considered in its historical, pathological, etiological and therapeutical relations, &c. By R. La Roche, M.D., &c. Philadelphia: Blanchard & Lea. 1855.—A Disquisition on the Ancient History of Medicine, &c. By Thomas L. Wright, M.D., Cincinnati. H. W. Derby. (Price 25 cents).—American Eclectic Obstetrics. By John King, M.D., Professor of Obstetrics and Diseases of Women and Children in the Eclectic Medical Institute of Cincinnati, &c. Cincinnati: Moore, Wilstach, Keys & Co.

Erratum—In No. 7, page 133, seventh line from foot note, for 4th read 1st.

Deaths in Boston for the week ending Saturday noon, Sept. 22d. 91. Males 50—females, 41. Accident, 1—asthma, 1—inflammation of the bowels, 2—disease of the bowels, 1—cancer, 1—consumption, 12—convulsions, 1—cholera infantum, 11—croup, 1—dysentery, 11—dropsy, 1—dropsy in the head, 3—debility, 2—infantile diseases, 5—puerperal, 1—epilepsy, 1—typhoid fever, 6—scarlet fever, 2—intermittent fever, 1—hooping cough, 5—disease of the heart, 4—inflammation of the lungs, 3—disease of the liver, 1—pleurisy, 1—purpura hemorrhagica, 1—disease of the spine, 1—smallpox, 9—unknown, 2.

Under 5 years, 46—between 5 and 20 years, 12—between 20 and 40 years, 19—between 40 and 60 years, 9—above 60 years, 5. Born in the United States, 70—Ireland, 11—England, 4—Germany, 4—Scotland, 1—British Provinces, 1.

Keloides.—The following note, by the Editor of the Southern Medical and Surgical Journal, is appended to Dr. Slade's article on this disease, which is copied from our pages into that Journal.

"This affection is quite common in this State (Georgia), among Africans or their immediate descendants, showing itself most generally upon the sternum in the form of one or more transverse bands of elevated and indurated cutaneous tissue. Although frequently of spontaneous origin, it does sometimes show itself at the seat of injuries of the skin, more or less serious. We have seen several negroes in whom they resulted from the effects of the lash upon the shoulders and back; in others, from burns. It is comparatively rare here in the white race, as we do not remember having seen more than three whites affected with it, whereas we must have seen at least fifty blacks thus affected. According to our observation, it is very generally harmless. We have seen a few cases, however, in which it terminated in suppuration, and then had very much the appearance of a scirrhus cancer. Yet the general health seemed unimpaired, and the suppuration was not attended with loss of substance nor extensive ulceration. We have usually let them alone; but in two instances where we practised extirpation, the disease returned."

Heavy Damages for Slander of a Physician.—Dr. O'Neal, of Baltimore, has recently obtained a verdict against a Mr. Jeffries, to the amount of \$10,000, for a libel against his professional character. The facts are these. A year ago last July, Jeffries met with a severe railroad accident, by which both legs were fractured, as asserted by Dr. O'Neal, who treated him accordingly. Some six or eight weeks afterwards the patient became dissatisfied, dismissed the Doctor, and contended that the bones had not been fractured, and even went so far as to publish a card in the papers, charging the Doctor with ignorance in not discovering that the limbs were not fractured, and for dishonestly pretending that they were. This was the ground of the libel, and for which the jury, after a long trial, and thorough investigation, awarded the above damages.—*St. Louis Med. and Surg. Journal*.

Regulation respecting Poisonous Substances.—The Prefect of the department of "Les Landes," in France, has just published a regulation which is likely to diminish the chances of mischief in the dispensing of actively poisonous substances. The pharmaciens are directed to use *red paper* for the labels of bottles which contain dangerous fluids, the words "for external use" being written thereon. The labels of ordinary medicine bottles, for internal use, are to be white. In this country, chemists are generally very careful to write "for external use" and "poison," when necessary; but the distinctive *color* is certainly an improvement, as the bottles may fall into the hands of persons who cannot read.—*Lancet*.

Casarean Section.—M. Stoltz has recently published the details of a case in which he performed this operation twice in the same individual with success, saving both mother and infant. The case has produced a great sensation in the medical world of France. The second operation is not so dangerous as the first, as adhesions are usually formed which facilitate recovery.—*ib*.

The Exhibition in Paris contains a most interesting department allotted to surgical instruments and surgical appliances. The French medical journals give the relative measurements of the Crystal Palace formerly in Hyde-park, and that in Paris. The figures show the Paris Exhibition to cover twice the space that was formerly enclosed in Hyde-park!—*ib*.

A writer in the *Lancet* proposes to fill the shaft of a stethoscope with water, secured by plugs of cork, as a means of increasing the capacity of the instrument for the transmission of sound.

Dr. Peter Parker, for twenty years medical missionary in China, has been recently appointed United States Commissioner to the Chinese Court. His knowledge of the language and of the habits of the people, from extensive intercourse with all ranks in the empire, renders this appointment peculiarly appropriate.—*N. Y. Med. Times*.